

REMARKS

The Office Action mailed March 23, 2004, has been reviewed and the Examiners comments have been carefully considered. Claims 2, 4-8, and 10 remain pending and are submitted for reconsideration.

Allowable Subject Matter

Applicants acknowledge with appreciation the allowance of claims 2 and 10 and the indication that claim 8 contains allowable subject matter.

35 U.S.C. § 103 Rejections

Claims 4-7 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,275,146 (Kithil) in view of U.S. Patent No. 5,474,327 (Schousek). As explained further below, the rejection should be withdrawn because a *prima facie* case of obviousness has not been established. In particular, there would have been no motivation to modify Kithil in view of Schousek to reach the claimed invention.

The Examiner acknowledges that Kithil fails to disclose a means for determining apparatus configured to determine “that a child or child seat is on the seat or mounted to the seat when the output of the seat weight sensor exceeds the first threshold value and is not more than the second threshold value” as called for in claim 4. (Office Action at p. 3.) The Examiner contends that one of ordinary skill in the art would have been motivated to modify the apparatus of Kithil “[b]ased on the teachings of Schousek … to provide a method of determining the presence and the type of object on the seat accurately in order to determine the deployment mode of the airbag during a vehicle crash.” (Office Action at p. 3.). The rejection should be withdrawn because, contrary to the Examiner’s assertion, “the teachings of Schousek” would not have motivated one of ordinary skill in the art to modify Kithil.

Kithil discloses a system that includes capacitive sensors 5 located in an interior vehicle roof 101 and in a dashboard 7 and a weight detecting device 9 located in a seat 102. (Kithil at col. 5, lines 18-28.) As shown in Table 1, a single threshold value is assigned to each capacitive sensor 5 (i.e., 50 mV and 100 mV) and to the weight detecting device 9 (i.e., 25 lbs). The output conditions of the sensors 5 and the weight detecting device 9 are

compared to the respective threshold to determine an occupant condition as shown in Table 1. (Kithil at col. 5, lines 22-24, 29-33; Table 1.)

There would have been no reason to modify the system of Kithil to include both maximum and minimum weight thresholds as shown in steps 72 and 76 in Fig. 5A of Schousek. Adding an additional threshold for the weight detecting device 9 would be pointless because the system of Kithil is already able to “reliably discriminate adults, children, infants, and inanimate objects in the seat” based on the outputs of the disclosed sensors 5 and the weight detecting device 9. (Kithil at col. 5, lines 18-33; Table 1.) Thus, there would be no motivation to make the proposed modification because (1) the modification would not have provided any additional function or benefit and (2) the modification would have needlessly increased the complexity and cost of the system disclosed in Kithil.

Similarly, one of ordinary skill in the art would not have been motivated to replace one of the existing capacitive thresholds in Table 1 of Kithil with an additional weight threshold because such a modification would have rendered the system of Kithil inoperative for its intended purpose. For example, elimination of either the capacitive-roof threshold or the capacitive-IP threshold would have prevented the system of Kithil from discriminating the first condition (i.e., Adult-knees close to Instr. Panel) and the eighth condition (i.e., Child standing on front floor) of Table 1. “If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggest or motivation to make the proposed modification.” MPEP § 2143.01.

For at least these reasons, there is no motivation for combining the cited references to reach the claimed invention. Thus, a *prima facie* case of obviousness has not been established. Reconsideration and withdrawal of the rejection of claim 4 is respectfully requested.

Claims 5-7 depend from claim 4 and are allowable therewith, for at least the reasons set forth above, without regard to further patentable limitations contained therein. These patentable limitations include, for example, a device “configured to determine that a *child seat* is mounted on the seat when the output of said seat weight sensor exceeds the second threshold value and when said human body proximity sensor does not detect the proximity of the human body” as called for in claim 7. In contrast, Schousek only discloses detecting an

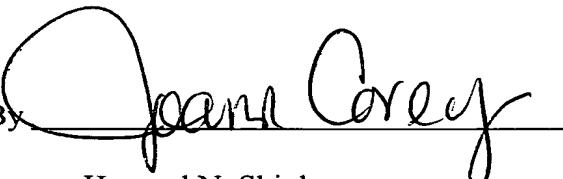
adult (step 74) when the maximum weight threshold is exceeded (step 72). (Schousek at Fig. 5A.) Reconsideration and withdrawal of the rejection of claims 5-7 is respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, Applicants believe the application is now in condition for allowance. Favorable reconsideration of the application is respectfully requested. If there are any questions regarding the prosecution of this application, the Examiner is invited to contact the undersigned attorney at the phone number listed below.

Respectfully submitted,

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